From: Brian Fristensky
To: Microsoft ATR
Date: 1/28/02 11:53pm
Subject: Comments on Microsoft Antitrust case

Please see attached HTML file.

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Brian Fristensky | ... now Microsoft has a new version
Department of Plant Science | out, Windows XP, which according to
University of Manitoba | everybody is the "most reliable
Winnipeg, MB R3T 2N2 CANADA | Windows ever". To me, this is
frist@cc.umanitoba.ca | like saying that asparagus is
Office phone: 204-474-6085 | "the most articulate vegetable ever."
FAX: 204-474-7528 |
http://home.cc.umanitoba.ca/~frist/   - Dave Barry
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Comments on Civil Action No. 98-1233 (CKK)
United States of America vs. Microsoft Corporation
State of New York et al. vs. Microsoft Corporation

by

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Judge Colleen Kollar-Kelly
microsoft.atr@usdoj.gov

Dear Judge Kollar-Kelly,

I wish to comment on the Microsoft Antitrust case awaiting judgment in your court. To keep things brief, I shall focus on points that I think have not been adequately brought out in the proceedings of which I am aware.

Point of information:
I am an Associate Professor in the Department of Plant Science at the University of Manitoba in Winnipeg, Canada. I have been doing research in molecular biology for over 20 years. I was also instrumental in the original development of software for DNA sequence analysis, beginning in 1979. I am an active contributor to the field of Bioinformatics, which has gained recognition recently in its role in sequencing the human genome. Finally, <u>I am an American citizen</u>.

A. The effects of Microsoft's practices, and the indirect effects of its "de facto standard"

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1. The Microsoft culture

It has been well established in court proceedings that Microsoft has a long history of premeditated anti competitive practices. The main point I want to make is that the decision making process at Microsoft is centered around leveraging the existing monopoly to maintain the monopoly. When you have the monopoly advantage, you choose different strategies than a company that uses different premises for decision making, such as "we need to be competitive" or "let's make the best product possible, and then figure out how to best market it." Microsoft's decision making, as shown in documents already presented to the court, has become entrenched in the practice of monopoly.

It is this type of mindset that allows Microsoft to treat its customers with contempt. The most glaring example is the Mail and News program, Outlook Express (OE). OE, through its feature of

allowing the user to directly click on any icon in an email or news message, resulting in the launch of an application, is fundamentally insecure. Even after repeated spread of viruses such as the "Melissa" virus, each time on a world-wide scale, Microsoft has refused to eliminate this feature from OE. Similarly, the integration of Visual Basic into applications such as MS Word makes it possible for viruses to propagate via text documents. In both cases, Microsoft has completely ignored security experts who advise that these strategies are fundamentally insecure, and remain invitations to an endless stream of viruses. Only a company with an arrogant certainty of market domination could afford to ignore such obvious flaws in its software.

2. The fact of monopoly results in *de facto* anti competitive effects

a) "No one was ever fired for buying Microsoft". In fact, this quote is based on an earlier generation quote "No one was ever fired for buying IBM". People make decisions not based upon whether a product is better, but they buy the MS product because it is a safe, defensible decision for which they can't be criticized.

Examples:

i) Long after NCSA Mosaic, and its successor, Netscape were introduced, Microsoft created Internet Explorer (IE). Even though IE was clearly an inferior product for several years, it quickly gained market share. Further leveraging of the Windows platform resulted in the ultimate domination of the browser market, at the expense of Netscape.

ii) RealPlayer and other products from www.real.com virtually created the market for browser-based multimedia. Yet, with the bundling of Windows Media Player (WMP), this established platform is losing ground. Why develop for RealPlayer when you can count on everybody having WMP?

iii) At one time there was a competitive market among word processors, spreadsheets, and drawing/presentation programs. Corel Word Perfect, Quattro Pro, and CorelDraw/CorelPresents were viable competitors to MS Word, MS Excell, and Powerpoint. Today, the MS products are overwhelmingly the only products in widespread use.

In each case, the Microsoft product took over an already existing market, not by being better, but simply, because it was made by Microsoft. These examples illustrate the point that the *de facto* aspects of the Microsoft monopoly are far more pernicious than the deliberate anti competitive practices. Put another way, everybody buys Microsoft because everybody has Microsoft. This phenomenon ensures the continuation of the Microsoft monopoly. One might call this the "market share cycle".   MTC-00029424_0003

b) Why develop for other platforms when Windows is the only one that anyone uses.

Just about any software developer will tell you that they develop for Windows because it is the dominant desktop platform. Although virtually all computer science professors will teach their students that software development should aim to be platform-independent (for very good reasons), the reality of the marketplace is such that this advice is ignored. Developers, not surprisingly, develop for platforms with a large market share. For most software developers, even developing for the Macintosh platform is not worth their while, because it is such a small percentage of the market share. The net result is that no one chooses which platform to develop

for, based on criteria such as quality of the platform, or ease of development. There is no choice at all. They develop for Windows.

Put another way, everybody develops for Windows because everybody develops for Windows. The process is self-perpetuating.

c) The self-perpetuating Microsoft monopoly impedes the evolution of computing

There are alternatives to the desktop computing model of MS-Windows. While Macintosh is the most visible competitor, Linux is also a credible contender. As well, server-based solutions such as Sun Microsystem's iPlanet platform (http://www.sun.com/software/sunone/overview/platform/), make it possible for both novice users and high-tech users to replace the desktop computer entirely with a user-friendly graphic terminal, or to run applications remotely through a browser. The latter is a viable model as high-speed Internet connections proliferate, especially because they eliminate the need for the user to do any system administration, and insulate the user from the hardware obsolescence, and allow the user to access their computer files and applications from anywhere in the world. Such alternative solutions are in fact used by a very small number of users. They are only slowly gaining ground due to the Microsoft monopoly. The users of these alternative platforms would all argue that they do so because these platforms are superior to the Windows platform. Whether any or all of these alternatives is actually superior is moot. A putatively-superior computing platform simply can not compete with the *de facto* Microsoft standard.

d) The Microsoft monopoly has a negative effect on the quality of alternative systems.

Even those of us who have chosen to use systems other than Microsoft Windows feel the negative impact of the monopoly. In my own case, I have operated my research laboratory, and performed all my teaching duties, almost exclusively on the Sun Unix system. Detailed examples can be found at http://home.cc.umanitoba.ca/~psgendb/nc/ . At home, my family and I exclusively use Linux.

While the members of my lab group, myself, and my students have often been ahead of the curve in utilizing networked computing resources, there have been a number of stumbling blocks resulting from the Microsoft monopoly. Probably the greatest problem is the fact that the choice of applications available on the Sun Unix system or Linux is much smaller than on Windows, due to the much smaller desktop market share of these systems. Again, developers won't write for these systems because the market share is small, and the market share stays small because the applications aren't available. When new hardware devices are marketed (eg. CD-ROM drives, printers, video cards etc.) the manufacturers seldom write drivers for non-Microsoft platforms. At the same time, they often refuse to make their specifications public, forcing the Linux community to reverse engineer new models in order to write device drivers.

The market share cycle also influences such fundamental things as the ability to purchase alternative systems. All computer stores sell computers with MS Windows preloaded. Only a small number of vendors will sell Linux pre-loaded, even though Linux is freely available. In many cases, a person wishing to run Linux might actually have to buy a Windows machine, thus paying for Windows, and then erase the hard drive and replace it with Linux. This phenomenon is sometimes referred to as the "Microsoft Tax". As well, because the user has to take the extra step of installing Linux, Linux is falsely perceived as being less user friendly. This would not be the case if the consumer had a choice of buying a pre-installed Linux system. MTC-00029424_0004

The self-perpetuating Microsoft monopoly therefore results in an arguably flawed operating system maintaining control of the direction of computing, even when better alternatives exist.

B. A behavioral remedy is inadequate because:

- **It does not break the market share cycle.** As long as Microsoft remains the "1 stop shopping" choice for all software needs, no alternative platform, whatever its merits, can compete. Even worse, as the Windows platform continues to scale to midrange servers, that vertical integration will make the Windows platform even harder for IT decision makers to avoid.
- **It guarantees endless litigation.** MS has managed to make a career out of doing what it wants anyway, while tying up cases in courts for years while competitors flounder.
- **It still leaves the MS anti competitive culture intact.** The Microsoft corporate culture, as the company is now structured, is oriented toward perpetuating the monopoly. As long as Microsoft remains intact, the culture and attitudes of its employees will be perpetuated.
- **One of the recommendations of the joint DOJ/Microsoft settlement released in September is that Microsoft should be required to make its software available on other operating systems besides Windows. This might actually result in a further domination of the desktop market**, because, due to the "No one ever got fired for buying Microsoft" phenomenon. Software that is currently common on non-Windows systems might be pushed out of the market by the perceived "industry standard" application. The goal should not be to encourage MS to grab an even larger market share. Rather, it should be to eliminate the self-propagating domination of the market share that prevents competitors from vying for some of that market share.

C. Microsoft should be broken into several smaller companies

It is my contention that behavioral remedies will not correct the fundamental problems caused by Microsoft's domination of desktop computing. My basic point is that if the settlement is to be truly fair, then Microsoft should be put onto the same level playing field as other companies. It must be forced to make its decisions based on a competitive model, not a domination model.

The structural remedy should be based on the breakup of Microsoft into several companies. There may be many possibilities, and it must be recognized that the breakup should not make it impossible to do business, and should not be structured such that its implementation would be disruptive to the world of computer users, most of whom currently use Windows and MS Office. One such structural remedy would see Microsoft broken into different companies specializing in specific product areas:

1. Operating system
2. Office (current MS-Office: WORD, Powerpoint etc.)
3. Internet and Enterprise services (IIS, Internet Explorer, Outlook Express)
4. .NET - API development tools
5. Applications (graphics, multimedia, etc.)

I believe that breakup into even 2 companies does not adequately curb the monopoly effect. It is too easy for two companies to coordinate efforts. It is more difficult for a larger number to coordinate. It also requires a greater effort on the customer's part to end up buying everything from an MS company, rather than buying some from MS, some from IBM, some from Sun, and others from another party.

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Other stipulations:

- None of these companies may use the name 'Microsoft' or 'Windows'. Each company will independently

choose new names (eg. Gatesware, Redmond OS, IIS Systems, .NET inc.) This makes it a little more *difficult for the 'Microsoft' product to be automatically recognized and chosen solely for its name. It* should be pointed out that MS really can't argue that it will be hurt one bit by a name change. Name changes in very large corporations happen all the time, especially in cases of mergers and acquisitions (eg. Esso to Exxon, AgrEvo to Aventis, Allegheny Airlines to USAir)

- The resultant companies are not permitted free access to resources of other former MS companies. They must license use of software, or access to source code, on the same terms as any other OEM, developer, or other partner. That is, if a former MS company licenses something from another former MS company, the same licensing terms must be made available to all interested OEMs or developers.
- MS companies are not allowed to dictate terms of inclusion or exclusion of other 3rd party software to any OEM or developer wishing to license products of former MS companies.

Current Microsoft corporate structure:
http://www.microsoft.com/press pass/corpprofile.asp

One might argue that a structural remedy is somehow "unfair" or overly punitive. However, Microsoft holds no sacrosanct position of privilege. There is no imperative that Microsoft must remain as a pillar of the American way. It is not entrenched in our constitution. It is simply a company that was successful at a certain business strategy, at the expense of the ruin of many other companies.

D. Benefits of a structural remedy

1) It works automatically, and requires less monitoring.

2) It lets smaller companies compete piece by piece with MS, rather than having to compete with the full bundled MS array of products.

Today, an OEM or an IT department really makes few decisions about what to put on their new computers. The choice of OS is a "no-brainer", because everybody uses Windows, and most software is developed for Windows. MS-Office is usually bundled with Windows, so there's no choice there. With WindowsXP, a full multimedia package is bundled - again no decision is made. If bundling were eliminated, OEMs and IT departments might return to making decisions about what kind of components best meet their needs, rather than just "voting the straight ticket" for Microsoft.

3) Business and home computer users will not be harmed by a Microsoft breakup.
As non-Windows users like myself have demonstrated, one can work just as easily on non-Windows platforms. Especially in the Open Software sector, there are alternatives for most of the main types of applications available on the Windows platform, including applications for office tasks (word processors, spreadsheets, drawing and presentation, calendars), multimedia (MIDI, MP3, video etc.), Internet (web browsers, mailers, FTP, telnet etc.) At the enterprise level, server-oriented tasks such as database management, web serving, application serving and such are strongly represented on alternative platforms such as Unix or IBM's AS400. As well, a Microsoft breakup doesn't mean that Microsoft will go away. It simply means that the consumer will have to explicitly choose Microsoft, rather than having no choice at all.

4) The evolution of computing will not be driven by a single computing platform. MTC-00029424_0006

Regardless of whether or not one believes that the Windows platform is good or inferior, the fact remains that it is a monolithic platform. For the average desktop user, Windows is synonymous with computing. The more deeply intertwined the different parts of Windows are allowed to become, the less chance there will be for evolution of ANY part in a way other than that decreed by Microsoft. Microsoft's current strategy is to continue evolving its desktop model of computing to higher levels of computing, such as enterprise

computing or supercomputing, where it is a very poor model. Yet, the sheer inertia of Microsoft's market share will drive this system even into places in which it is not an appropriate solution. A set of smaller companies derived from Microsoft would not have the same power over the development of computing, allowing for greater diversity, which is key to any evolutionary process.

E. Closing remarks

Perhaps as good an argument as any from breaking up Microsoft is because computing has become central to almost every aspect of life in the modern world. Computing is unlike, say the oil industry, or the food industry. No car runs on just one brand of gasoline, and people buy a variety of foods because they like variety. When you couple our great dependence on computers in all walks of life, with the monolithic structure nature of desktop computing as controlled by a single company, the result is that the company that dominates that computing infrastructure has some degree of control on most aspects of our modern life. The level of power wielded by Microsoft is frightening. The fact that they had sufficient clout to cause the US Justice Department to reverse its position on a breakup is a chilling example of that power. The fact that Microsoft has maintained its arrogant domination of the computer market, and been allowed to do so with impunity, should be cause for alarm.

It is not unAmerican for any branch of government, executive, legislative or judicial, to limit the power of a private corporation, if that corporation is usurping powers that should rightly be exercised by the government or by the free market. Bill Gates was not elected by voters. The management of Microsoft is not accountable to the public. The antitrust laws were wisely enacted in recognition of the fact that non-elected entities such as corporations could sometimes wield too much power. It is the job of the judiciary to ensure that they are not allowed to do so.

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